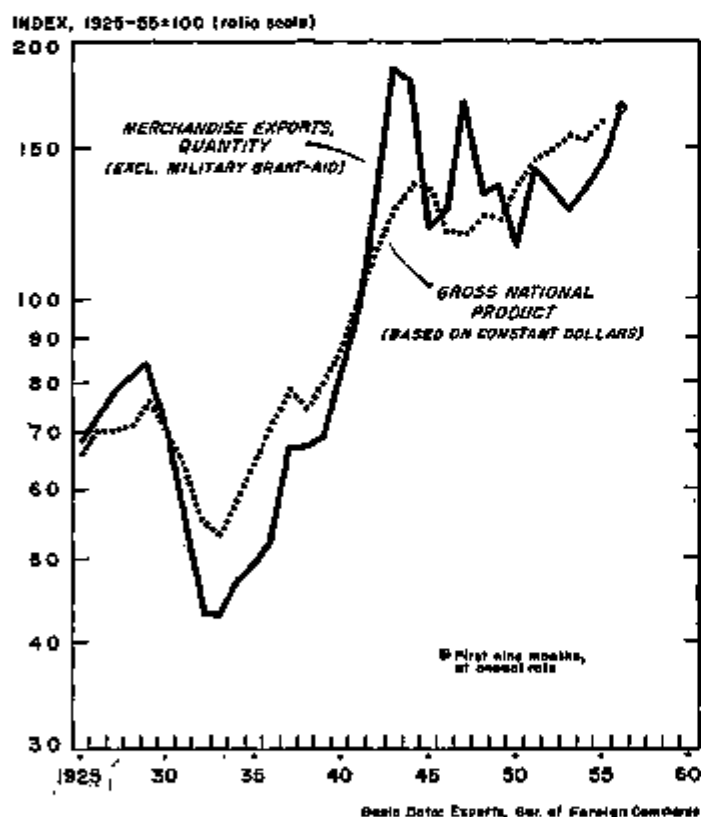


# Exports and Domestic Business

**E**XPANSION in export business stands out as one of the important demand factors underlying the buoyancy of the domestic economy in 1956. Merchandise exports (excluding military aid goods) climbed to an unprecedented \$16.8 billion at an annual rate during January-October 1956, up nearly 20 percent from the like period of 1955. Taken as an aggregate, exports during 1956 claimed a larger share of national output than in any year since the post-Korean boom period of 1951.

## Merchandise Exports and Gross National Product



U. S. Department of Commerce, Office of Business Economics

56-43-B

During 1956 and throughout the postwar period exports, particularly of agricultural items, have been facilitated by Government aid and special financing arrangements. Exports (excluding military aid) over the period 1946-56 have aggregated \$143 billion while Government net economic aid since the end of World War II has totaled about \$39 billion.

NOTE.—MISS BRADSHAW, MR. ROXON, AND MR. LECHTER ARE MEMBERS OF THE BALANCE OF PAYMENTS DIVISION, OFFICE OF BUSINESS ECONOMICS.

The major expansion in markets abroad during the current year makes particularly relevant the present study of long-run changes in the composition and direction of United States exports and their implications for the domestic economy. The review, which covers the period from 1925 to 1956, complements a somewhat similar analysis of merchandise imports presented in the November 1955 issue of the *SURVEY*. Both studies have involved a complete reclassification of the foreign trade data into new commodity categories which can be compared with broad domestic and foreign indicators of production and demand as well as output in individual domestic industries.

## Exports and gross national product

The chart pictures the overall comparisons of the movements since 1925 of gross national product expressed in constant dollars and the volume of exports of domestically-produced goods. Over this long period the average yearly increase in the real gross national product was 3 percent while the annual increment in the volume of export business averaged 2.6 percent.

The 1956 ratio of exports to gross national product is near the ratio associated with the post-Korean scare-buying period of 1951 although below that of the years immediately following World War II—particularly in 1947 when pent-up demands abroad resulted in a record volume of exports. Each of the consecutive annual gains in exports over the past three years, however, has resulted in a higher relationship of exports to the gross national product. In 1954 exports expanded and thus aided in offsetting a moderate dip in other components of the gross national product, while in 1955 and 1956 the growth in export sales was proportionately greater than the increase in domestic sales of the Nation's overall output.

The claim of exports on the gross national product during 1956, moreover, is relatively greater than during the 1930's—including the years immediately preceding World War II when exports had regained much of the ground lost during the recession of 1930-32.

As compared to the 1920's, however, exports—notwithstanding their recent gains—have declined relative to the gross national product. This development, which must be attributed mainly to the changes in the flow of dollars abroad and other demands on foreign dollar resources, appears to have affected mostly our agricultural exports over this period. From 1929 to January-September 1956 the quantity of agricultural exports increased by about one-third while the gross national product in constant dollars expanded by around 120 percent. Over the same period, the volume of nonagricultural exports had risen relatively faster than the gross national product—by almost 140 percent.

It is true that the expansion in the volume of agricultural exports since 1929 has been proportionately about as great as the real rise in gross farm product while the long-term increase in nonfarm exports matched an almost equal relative growth in the volume of nonfarm gross national product. Yet the fact that agricultural exports have continued

throughout the entire period to account for a relatively much larger component of total exports than farm product has of the aggregate national product, accounts in large measure for the decline in the overall relationship between total exports and total domestic output.

In further evaluating the somewhat greater rise in gross national product than in exports since the 1920's it should be noted that a considerable portion of the long-term rise in gross national product has consisted of Government services and other nonmerchandise items. Hence the ratio of exports to domestic output of movable goods alone shows an even more moderate decline than the ratio of exports to the overall gross national product.

Notwithstanding their reduced claim on domestic output since the 1920's, exports during intervals of declining domestic business activity have behaved more favorably in the postwar period than in prewar years. In 1948-49 as well as during 1953-54, the volume of exports expanded and thus compensated in part for the slack in domestic demands. This contrasts with developments in 1930-32 when a relatively sharper drop occurred in exports than in domestic business, largely because of the rapidly shrinking outflow of United States capital. In 1937-38 exports also dipped although on slightly and relatively far less than domestic output.

The relationship between exports and gross national product in current dollars would be substantially similar to that pictured in the chart. The current value data, however, show a much steeper decline in exports relative to the gross national product during the early 1930's. During that period prices of farm products, which weigh far more heavily in exports than in gross national product, moved downward considerably faster than prices of other goods. Looking at the more recent period, 1954-56, the rise in the current value of exports relative to the current value of gross national product is somewhat less accentuated than that shown on the constant value chart due to the downtrend in export prices of some major agricultural export items.

Trends in the relationship of exports to the gross national product obviously provide only a summary evaluation of the changing claim of exports on domestic economic output. Hence in the discussion which follows, broad shifts in the commodity structure and direction of exports are analyzed

and related to basic developments abroad and corresponding changes in the output of major groups of domestic industries.

### Changed commodity structure of exports

For purposes of this study, exports have been reclassified into four major categories: Capital equipment, consisting of machinery and commercial transportation equipment; producers' supplies and materials including both crude and fabricated materials (except food and drugs); food and drugs; and finished consumer items except food and drugs. These groupings, in turn, have been subdivided into their respective agricultural and nonagricultural components.

The chart on p. 10 contrasts the patterns of change since 1925-29 in each of these major categories of exports, and illustrates the extent to which nonagricultural products (excluding food and drugs), particularly capital equipment, dominated the rise in exports from the prewar to the postwar periods.

In the first 9 months of 1956 our foreign customers had raised their dollar expenditures for United States-produced capital equipment to an annual rate of \$5.2 billion or by nearly 600 percent as compared with 1925-29 and by over 900 percent as compared with 1930-39. Exports of machinery and commercial transportation equipment, moreover, comprised nearly one-third of total domestic exports during January-September 1956, a share greatly in excess of that prevailing during either the 1920's or the 1930's (see table 1).

The less spectacular but nevertheless significant growth since the prewar years in foreign purchases of nonagricultural producers' supplies and materials is also highlighted in the chart and contrasts sharply with the behavior of exports of agricultural materials over the same period. Whereas in January-September 1956 the value of exports of nonagricultural materials had climbed to \$5.6 billion at an annual rate as compared with yearly averages of \$1.7 billion in 1925-29 and hardly \$1.0 billion in the 1930-39 period, the current rate of agricultural raw material exports is scarcely higher than in the years 1925-29. The latter development reflects primarily the declining relative importance of raw cotton which comprised 18 percent of total United States exports in 1925-29 and considerably less than 5 percent in recent years.

Notwithstanding its far less prominent role as a supplier of raw material exports, the agricultural sector of the

Table 1.—Domestic Exports of Agricultural and Nonagricultural Products, by Economic Categories, 1925-56

Category	Yearly averages								1954		1955		1956 <sup>1</sup> (Jan.-Sept. at annual rate)	
	1925-29		1930-39		1940-49		1950-53		Million dollars	Percent	Million dollars	Percent	Million dollars	Percent
	Million dollars	Percent	Million dollars	Percent	Million dollars	Percent	Million dollars	Percent						
Total domestic exports, adjusted (excluding military grant aid) <sup>2</sup>	4,874	100.0	2,528	100.0	12,137	100.0	12,303	100.0	12,797	100.0	14,116	100.0	15,378	100.0
Agricultural.....	1,830	37.5	783	30.9	3,543	29.2	3,200	26.1	3,054	24.1	3,196	22.7	3,794	24.6
Nonagricultural.....	3,044	62.5	1,745	69.1	8,594	70.8	9,103	73.9	9,743	75.9	10,920	77.3	11,582	75.4
Producers' supplies and materials.....	2,800	57.4	1,474	58.3	4,827	39.8	5,194	42.2	5,450	42.6	6,065	43.0	6,859	44.6
Agricultural.....	1,303	26.8	501	19.7	1,012	8.4	1,367	11.1	1,406	11.1	1,183	8.4	1,218	7.9
Nonagricultural.....	1,497	30.6	973	38.6	3,815	31.4	3,827	31.1	4,044	31.5	4,882	34.6	5,641	36.7
Capital equipment.....	765	15.7	527	20.7	3,332	27.4	3,664	30.0	4,087	31.9	4,330	30.6	5,316	34.6
Food and drugs.....	822	16.9	312	12.3	2,765	22.8	2,205	18.1	1,038	8.1	2,284	16.2	2,820	18.3
Agricultural.....	777	15.9	283	11.2	2,631	21.7	1,032	8.4	1,048	8.2	2,013	14.5	2,576	16.7
Nonagricultural (mainly drugs).....	45	.9	29	1.1	234	1.9	273	2.2	390	3.0	271	1.9	283	1.8
Finished consumer goods (excluding food and drugs).....	481	9.9	232	9.2	1,072	8.8	976	7.9	1,112	8.7	1,245	8.8	1,268	8.2
All other and unclassified (mainly ship- ments valued under \$100).....	6	.1	2	.1	141	1.2	134	1.1	170	1.3	170	1.2	178	1.1

1. Unadjusted for seasonal variations.

2. Adjusted to exclude household and personal effects and motion picture films exported on a royalty basis.

Sources: U. S. Department of Commerce, Office of Business Economics.

economy has accounted for the bulk of the increase since the prewar period in United States exports of consumer-type items. A comparison of the two lower panels on the chart shows that during the postwar years shipments of foodstuffs have far overshadowed our aggregate exports of a wide range of finished consumer items (except food and drugs). Throughout the postwar period, moreover, foodstuffs have comprised a considerably larger component of total United States exports than during the 1930's while finished consumer items (other than food and drugs) have become somewhat less important relative to the overall export picture.

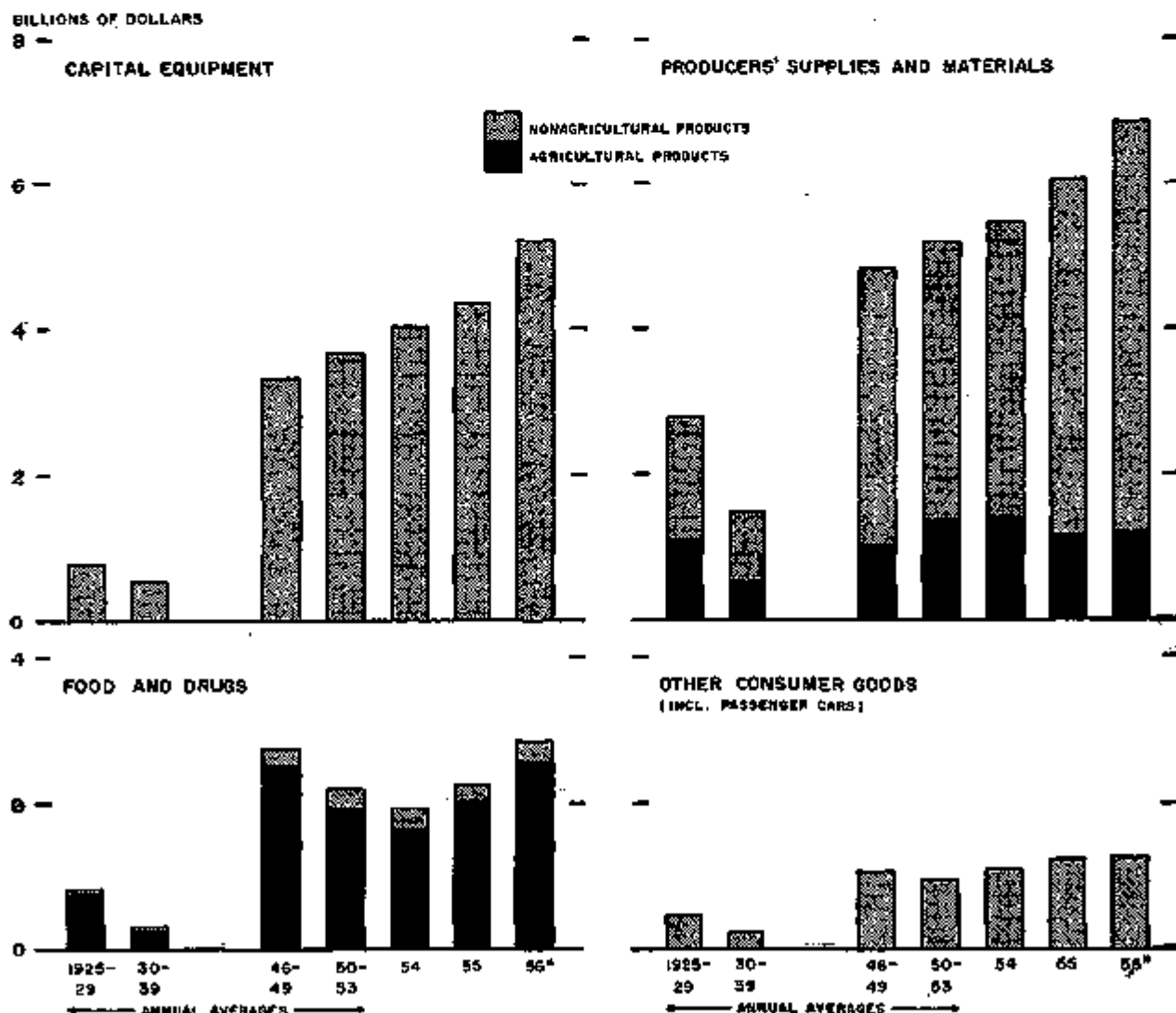
The relatively minor share of finished nonfood consumer items in our total postwar exports (less than 8 percent in January-September 1956) can be attributed, among other factors, to the discrimination against consumer goods in favor of capital equipment by means of import and foreign exchange controls in many of our leading foreign markets.

### Shift to Western Hemisphere markets

These long-term variations in the commodity pattern of United States export trade obviously resulted to a major extent from shifts in the relative importance of our leading export markets, each of which has displayed its own distinct pattern of commodity demand. Most pronounced among such shifts since the prewar period has been the far greater prominence of Western Hemisphere countries, and the diminished role of European countries, as destinations for United States exports. This development, it will be recalled, is analogous to a somewhat similar secular change in the relative position of these areas as suppliers of United States merchandise imports. Such similar shifts in the geographical pattern of both our exports and imports as compared to the period before World War II are of course far from being coincidental, since the postwar rise in the quantity and price

## Merchandise Exports by Economic Categories

Excluding Military Grant-Aid



of United States imports from Western Hemisphere countries has contributed prominently to their purchasing power. Moreover, the reemergence in recent years of other industrial countries as export competitors has not advanced sufficiently to substantially diminish the dominant position of the United States as a supplier in these markets.

### Canada supersedes UK as leading market

Table 2 shows that in recent years, including the first 9 months of 1956, our customers in the Western Hemisphere claimed around one-half of total United States exports, whereas in each of the periods 1925-29 and 1930-39 their combined share aggregated about one-third.

Currently, Canada alone accounts for one-fourth of our total export sales. In January-September 1956, Canadian purchases in the United States climbed to a record annual rate of \$4.1 billion and were over 5 times as great as our sales to the United Kingdom which had been the leading individual United States export market during the prewar period (see table 2).

### Rise in Latin American export business

Although mainly due to the declining importance of Argentina as a market, the relative expansion in United States sales to Latin America as a whole was somewhat less remarkable than the corresponding increase in shipments to Canada, the growth in certain individual Latin American export markets, particularly Mexico, Colombia, and Venezuela, was proportionately even greater than that occurring in the case of the Canadian market (see table 2).

These long-term gains in exports to Western Hemisphere countries are in part a reflection of our increased importance relative to other exporting countries as a supplier of both Canadian and Latin American imports. The share of the United States in total Canadian imports rose from about three-fifths in 1937 to nearly three-fourths in the first half of 1956 while our proportionate contribution to aggregate Latin American imports increased over the same period from about one-third to roughly one-half.

Table 2.—Exports (including reexports) by Continents and Selected Countries of Destination,<sup>1</sup> 1925-56

Area and country	Yearly averages								1954		1955		1956 <sup>2</sup> (Jan.-Sept. at annual rate)	
	1925-29		1930-39		1940-49		1950-53		Million dollars	Percent	Million dollars	Percent	Million dollars	Percent
	Million dollars	Percent	Million dollars	Percent	Million dollars	Percent	Million dollars	Percent						
Total exports (excluding military grants aid).....	4,931	100.0	3,604	100.0	12,245	100.0	12,346	100.0	12,353	100.0	14,362	100.0	16,570	100.0
Western Hemisphere.....	1,718	34.6	833	23.1	5,009	40.9	5,168	41.9	5,475	44.3	6,890	48.0	7,900	47.7
Canada.....	827	16.8	408	11.3	1,870	15.3	2,734	22.1	2,966	23.9	3,490	24.3	4,065	24.5
Other.....	891	17.8	425	11.8	1,139	9.4	3,434	27.7	5,509	44.4	3,400	23.7	3,835	23.2
Mexico.....	128	2.6	69	1.9	331	2.7	632	5.1	634	5.1	700	4.9	804	4.8
Cuba.....	164	3.3	62	1.7	396	3.2	468	3.8	439	3.6	481	3.3	489	2.9
Colombia.....	49	1.0	27	0.7	185	1.5	243	2.0	343	2.7	331	2.3	347	2.1
Venezuela.....	37	0.7	29	0.8	419	3.4	467	3.8	534	4.3	636	4.4	511	3.1
Argentina.....	169	3.4	65	1.8	345	2.8	158	1.3	123	1.0	148	1.0	232	1.4
Brazil.....	56	1.1	49	1.4	470	3.8	479	3.9	456	3.7	241	1.7	288	1.7
Chile.....	44	0.9	30	0.8	113	0.9	117	0.9	75	0.6	91	0.6	137	0.8
Central American Republics.....	77	1.5	41	1.1	241	2.0	249	2.0	300	2.4	295	2.1	304	1.8
Other.....	137	2.7	85	2.3	438	3.6	590	4.8	616	5.0	677	4.7	743	4.5
Rest of world.....	3,213	65.4	1,771	48.9	7,236	59.1	6,178	50.2	6,878	55.7	7,472	51.9	8,670	52.3
Europe.....	2,392	48.5	1,171	32.5	4,551	37.2	4,378	35.5	4,486	36.3	4,398	30.7	4,965	30.0
Sweden.....	49	1.0	45	1.2	202	1.6	115	0.9	119	0.9	102	0.7	128	0.8
United Kingdom.....	908	18.4	455	12.6	1,822	14.9	1,072	8.7	924	7.5	924	6.4	809	4.9
Belgium.....	113	2.3	63	1.7	358	2.9	294	2.4	270	2.1	319	2.2	309	1.9
France.....	256	5.1	142	3.9	634	5.2	335	2.7	333	2.7	369	2.6	335	2.0
Netherlands.....	189	3.8	71	1.9	343	2.8	283	2.3	423	3.4	476	3.3	632	3.8
Germany.....	439	8.9	130	3.6	338	2.8	440	3.6	494	4.0	595	4.1	708	4.3
Switzerland.....	10	0.2	10	0.3	154	1.2	182	1.5	154	1.2	164	1.1	203	1.2
Italy.....	162	3.3	86	2.4	437	3.6	375	3.0	305	2.4	356	2.5	406	2.4
Spain.....	78	1.6	30	0.8	89	0.7	71	0.6	90	0.7	154	1.1	235	1.4
Greece.....	18	0.4	7	0.2	142	1.2	73	0.6	48	0.4	76	0.5	90	0.5
Yugoslavia.....	1	(*)	3	0.1	48	0.4	86	0.7	100	0.8	131	0.9	121	0.7
Turkey.....	4	0.1	5	0.1	460	3.8	86	0.7	79	0.6	96	0.7	110	0.7
Other.....	219	4.4	143	3.9	356	2.9	414	3.4	370	3.0	480	3.4	577	3.5
Asia.....	575	11.6	419	11.6	1,518	12.4	2,056	16.7	2,430	19.7	2,146	15.0	2,575	15.5
India.....	52	1.1	33	0.9	284	2.3	803	6.5	162	1.3	187	1.3	236	1.4
Pakistan.....	78	1.6	64	1.8	32	0.3	87	0.7	32	0.3	50	0.4	141	0.8
Philippines.....	259	5.2	195	5.4	411	3.3	302	2.4	326	2.6	339	2.4	311	1.9
Japan.....	259	5.2	195	5.4	328	2.7	577	4.7	680	5.5	543	3.8	759	4.6
Korea.....	n. a.	n. a.	n. a.	n. a.	45	0.4	65	0.5	87	0.7	125	0.9	167	1.0
Iran.....	1	(*)	4	0.1	45	0.4	27	0.2	48	0.4	64	0.4	73	0.4
Iraq.....	1	(*)	2	0.1	11	0.1	20	0.2	28	0.2	34	0.2	39	0.2
Israel.....	2	(*)	3	0.1	40	0.3	92	0.7	79	0.6	90	0.6	97	0.6
Saudi Arabia.....	1	(*)	11	0.3	64	0.5	64	0.5	43	0.3	69	0.5	78	0.5
Thailand.....	2	(*)	2	0.1	17	0.1	49	0.4	43	0.3	50	0.4	61	0.4
Indochina (Vietnam, Laos, Cambodia).....	2	(*)	2	0.1	16	0.1	28	0.2	61	0.5	33	0.2	79	0.5
China.....	117	2.4	69	1.9	278	2.3	8	0.1	8	0.1	105	0.7	107	0.6
Formosa.....	n. a.	n. a.	n. a.	n. a.	17	0.1	53	0.4	84	0.7	105	0.7	107	0.6
Other.....	68	1.4	33	0.9	328	2.7	411	3.3	341	2.7	365	2.5	470	2.8
Oceania.....	184	3.7	71	1.9	194	1.6	232	1.9	263	2.1	294	2.1	235	1.4
Australia.....	184	3.7	71	1.9	194	1.6	232	1.9	263	2.1	294	2.1	235	1.4
New Zealand.....	38	0.8	17	0.5	48	0.4	40	0.3	43	0.3	52	0.4	46	0.3
Other.....	2	(*)	2	0.1	5	0.0	22	0.2	30	0.2	41	0.3	44	0.3
Africa.....	109	2.2	90	2.5	379	3.1	533	4.3	617	5.0	635	4.4	765	4.6
Egypt.....	11	0.2	0	0.0	40	0.3	42	0.3	40	0.3	79	0.6	120	0.7
Belgian Congo.....	1	(*)	0	0.0	43	0.4	68	0.5	49	0.4	53	0.4	61	0.4
Union of South Africa.....	63	1.3	50	1.4	350	2.8	196	1.6	229	1.8	261	1.8	372	2.2
Other.....	44	0.9	39	1.1	240	1.9	216	1.7	209	1.7	232	1.6	312	1.9

n. a. Not available. \* Less than one-tenth of one percent.

1. Global and area totals (and Canada) include "cash special category" exports (potential military end-items not shipped under military grant aid programs). Individual country totals exclude all "special category" exports.

2. Unadjusted for seasonal variations.

3. Including "cash special category" for the entire area.

4. Yearly average for 1945-1947.

Source: U. S. Department of Commerce, Office of Business Economics.

### Impact of U. S. direct investments

United States investments are a major factor contributing to our stronger position in both these markets. During the postwar years Canada has been the most prominent country receiving United States capital. The heavy outflow of such funds from the United States has greatly facilitated the high rate of development and expansion which has characterized the Canadian economy in recent years and which, in turn, has stimulated Canadian demands for imported capital equipment, industrial materials, and other goods.

In Latin America, the other major area to which United States private foreign investment activity has been directed since World War II, Venezuela provides an outstanding example of the link between such investments and the demand for United States exports. To an important extent due to the large-scale development by American-controlled companies of Venezuela's petroleum, and more recently its iron ore industry, Venezuela's national income in 1955 was 9 times as great as in 1937. Over the same period, Venezuelan imports from the United States underwent a twelve-fold expansion and climbed even further in the first 9 months of 1956 to an annual rate of over \$600 million.

### Declining role of U K market

Although during the first three quarters of 1956 United States nonmilitary exports to Europe were at an annual rate of nearly \$5 billion, the highest since 1947, Europe continued to account for a considerably smaller portion of our total exports than during either the 1920's or the 1930's. This development reflects primarily the relative decline in shipments to the United Kingdom which since World War II has obtained a far greater portion of its import requirements from the rest of the sterling area.

Although over this period Germany and France also claimed a diminishing share of United States exports, continental European countries as a group claimed about one-fourth of our total exports during 1955 and the first 9 months of 1956, a portion nearly as large as during the prewar period. This reflects the currently greater importance of Netherlands, Switzerland, Greece, Yugoslavia, and Turkey in our overall exports than in the years before World War II.

### New markets in Middle East and Africa

The emergence of new markets, particularly in Middle-Eastern countries where United States interests have made

prominent contributions to the development of the petroleum industry, has also been a noteworthy feature of our postwar export trade. Exports to countries such as Iran, Iraq, and Saudi Arabia, almost negligible before World War II, have displayed an almost steady uptrend in recent years. Israel, another large postwar recipient of United States capital and of private and Government aid has likewise become a fairly significant market for United States merchandise, as have Thailand, Egypt, and the Belgian Congo.

### Exports to Asia rise faster than imports

It is interesting to note that as compared with the prewar period United States exports to Asia have risen relatively much faster than our imports from Asia, while at the same time, exports to Canada, Latin America, and Europe have increased in very roughly the same proportions as our respective merchandise imports from these areas.

Whereas during the prewar period Japan financed its dollar purchases by maintaining an export surplus with the United States, during the postwar period Japan has financed a sizable portion of its increased dollar imports by means of United States Government aid and receipts from United States military expenditures. Our enhanced exports during the postwar period to some other Asiatic countries—particularly Korea, Formosa, and Indochina, have also been financed to a large extent by Government economic aid.

### Diverse trends in outer sterling area markets

Export sales to India and Pakistan, also consisting in part of commodities shipped under special Government programs, have risen relatively much faster as compared with the prewar period than United States imports from these countries. In recent years the Union of South Africa has likewise developed into a far more prominent export market than before World War II, but without the need for Government aid.

United States trading relationships with Australia and New Zealand, on the other hand, have undergone an opposite long-term change, the expansion in exports to these two sterling area countries since the prewar period having been relatively moderate, especially when contrasted to the corresponding rise in their sales to the United States.

Table 3.—Domestic Exports in 1955 by Geographic Areas and by Economic Categories

Area	Exports of each economic category by area										Percent distribution of exports to each area by economic category					
	All categories, total		Capital equipment		Producers' supplies, materials		Food and drugs		Finished consumer goods <sup>1</sup>		Unclassified		All categories, total	Capital equipment	Producers' supplies, materials	Food and drugs
	Million dollars	Percent	Million dollars	Percent	Million dollars	Percent	Million dollars	Percent	Million dollars	Percent	Million dollars	Percent	Percent	Percent	Percent	Percent
Total domestic exports, adjusted <sup>2</sup> (excluding military grant aid)	14,116	100.0	4,950	100.0	6,068	100.0	2,284	100.0	1,245	100.0	179	100.0	100.0	100.0	100.0	100.0
Canada	3,181	22.5	1,171	23.6	1,288	21.2	236	10.3	379	30.5	57	31.8	100.0	36.8	33.7	7.2
Other Western Hemisphere	3,207	22.7	1,190	24.0	1,182	19.5	485	21.2	440	35.3	70	39.1	100.0	34.0	33.1	13.4
Europe	4,170	29.5	1,682	33.9	2,231	36.8	1,008	44.1	193	15.5	21	11.7	100.0	18.8	58.4	25.7
Asia and Oceania	3,321	23.5	605	12.1	982	16.2	307	13.4	146	11.7	21	11.7	100.0	27.1	40.1	29.9
Africa	336	2.4	236	4.8	188	3.1	85	3.7	57	4.6	10	5.6	100.0	57.3	10.7	18.8
"Cash special category"	955	6.8	438	8.8	319	5.3	—	—	—	—	—	—	—	—	—	—

1. Excluding food and drugs.  
2. Adjusted to exclude household and personal effects and motion picture films exported on a royalty basis.

3. Includes "cash special category" exports; these are not available on a contingent by economic category basis.

Source: U. S. Department of Commerce, Office of Business Economics.

### *Demand patterns differ by area*

Table 3 shows the relative weights of each of the four major commodity categories in our exports to each continent during 1955. It contrasts the remarkably similar patterns of demand on the part of Canada, Latin America, and Africa, with the considerably different structures of demand reflected in our exports to Europe and Asia.

Whereas machinery and commercial transportation equipment comprised over one-third of the total value of our exports to Canada, Latin America, and Africa, it represented only 27 percent of total United States exports to Asia and less than 16 percent of our aggregate shipments to Europe. Moreover, finished consumer items (other than food and drugs), a fairly substantial component of our export trade with Western Hemisphere countries and with Africa, accounted for hardly 5 and 6 percent of total 1955 exports to Europe and Asia, respectively.

Although producers' supplies and materials ranked in importance with capital equipment as an outstanding segment of United States export trade with both Canada and Latin America, this commodity category formed an even more dominant portion of our exports to the rest of the world, particularly to Europe.

The extent to which European demand was concentrated on producers' supplies and materials and on foodstuffs, is especially striking. These basic items, which comprised over three-fourths of our overall \$4.1 billion of nonmilitary export shipments to Europe in 1955, were relatively even a larger part of our total sales to prominent individual European customers such as the United Kingdom, Germany, the Netherlands, and Italy.

Exports to Japan were dominated by foodstuffs and industrial supplies and materials to an even greater extent than exports to Europe. This was not true, however, of exports to a number of other countries in Asia and Oceania. Sales of capital equipment bulked large in our shipments to Australia, New Zealand, India, Pakistan, Thailand, and the oil-producing countries in the Middle East. Middle Eastern countries, moreover, also devoted a sizeable portion of their total dollar expenditures to the purchase of durable consumer goods such as appliances and passenger cars.

Due to limitations in the export statistics themselves, and to the changing relative importance and varied demand characteristics of individual export markets within each major area, it is somewhat difficult to generalize and to compare these recent patterns of demand with the patterns which characterized our trade with each continent during the 1920's and the 1930's. Several outstanding changes should be noted, however, from the standpoint of their contribution to the major shifts which have occurred in the overall commodity structure of our export trade.

### *Heavy equipment to Western Hemisphere*

During the postwar period machinery and commercial transportation equipment have comprised a substantially larger share of total United States exports to both Canada and Latin America than during the years before World War II, a development which accounts in large measure for the more prominent role of capital equipment in the makeup of our overall exports during recent years.

The more than fivefold rise in such sales to Canada from 1929 to 1955 and the even greater gain as compared with 1937, coupled with similar relative advances in Canadian domestic investment, have been a major factor in the rise of the Canadian gross national product. Record shipments of capital equipment to Canada during 1956, moreover, reflect new peaks in Canadian expenditures both for new construction and for machinery and equipment.

Our currently high sales of capital equipment to Latin America, which reflect absolute and relative long-term gains rivalling those which occurred in exports to Canada, likewise may be attributed to the long-term growth of investment outlays in that area, including large United States investments. In recent years such expenditures have claimed a considerably larger share of the total goods and services available to Latin America as a whole than in either 1929 or 1937.

Since it is anticipated that in Latin America as well as in Canada, heavy construction activity will reach an all-time high in 1956, it is not surprising that construction and mining machinery, tractors, electrical machinery, engines and turbines and other heavy equipment bulk large in our current sales to both areas. Since World War II, trucks and buses and some other forms of commercial transport equipment have also become relatively more important items in exports to both areas, particularly to Latin America where much of the recent increase in new construction activity has been in highway development and improvement.

Accelerated development and expansion programs in a number of countries in Asia and Africa have likewise contributed to the increased relative importance of capital equipment in our total exports as compared with the prewar period. Nevertheless, in 1955, Canada and Latin America each accounted for between 25 and 30 percent of overall export sales in this category.

### *Consumer goods sales to nearby markets*

The dominant role of the rest of the Western Hemisphere, as a market for finished consumer goods (excluding food and drugs) was also a notable feature of our postwar export trade. As a group, Western Hemisphere countries accounted for nearly two-thirds of total United States exports in this category during 1955, a portion considerably greater than before World War II.

Ranked in order of their importance, the three top customers in 1955—Canada, Venezuela, and Cuba—accounted for nearly one-half of our total foreign sales within this group. These three markets, significantly enough, are among the few which have been relatively free from import and exchange controls during the postwar period. In Mexico, which rivaled Cuba as a market for American consumer goods, import and exchange controls have also been considerably less restrictive than those enforced by the majority of other countries.

### *Exports of radio, TV, and appliances*

Exports of radio and TV, electrical appliances, and phonographs and records were among those consumer items to show the largest relative gains since the prewar period. In 1955 sales to Western Hemisphere countries claimed 83 percent of our exports of radios and TV, nearly three-fourths of total foreign sales of electrical appliances, and two-thirds of our exports of phonographs and records. Perhaps even more interesting is the fact that Canada by itself claimed a share of over 45 percent in aggregate United States exports of these three products.

### *Smaller gains in passenger car sales*

Whereas exports of passenger cars to Western Hemisphere countries had more than doubled from 1929 to 1955, shipments to the rest of the world gained by one-third. European purchases rose by even less than one-third while sales to Australia and New Zealand showed a large absolute decline.



It is true that in 1955 the dollar volume of passenger car sales to Asiatic countries was twice as high as in 1929, while exports to the Union of South Africa—our outstanding market in Africa—had enjoyed an even greater relative expansion. The latter two markets, however, accounted for about one-fifth of total passenger car exports in 1955, only half the share accounted for by Latin America alone.

Sales of most other major types of nonfood consumer goods exports—including textiles, leather goods, and durable household equipment other than appliances—to Canada and other Western Hemisphere countries similarly exceeded our sales to the rest of the world.

### *Limited consumer goods sales to Europe*

In Europe, Belgium and Switzerland stand out as fairly significant markets for American consumer goods, especially passenger cars. Excluding purchases by these two countries, amounting to roughly \$70 million in 1955, European expenditures for such items, including passenger cars, aggregated hardly \$100 million. A few countries, moreover, notably Sweden, France, and the Netherlands accounted for the bulk of these purchases.

Aside from shipments to the Western Hemisphere and these five European countries, the Middle East, the Philippines, and South Africa account for most of our remaining current export sales of such consumer end-items.

### *Wide gains in nonfarm basic exports*

In contrast to the long-term gains in exports of capital equipment and consumer goods which were concentrated to a large extent in Western Hemisphere markets, the rise in exports of nonagricultural raw materials reflects accelerated shipments to every continent except Oceania. On the other hand, the relative long-run decline in sales of agricultural raw materials, particularly unmanufactured cotton, was almost entirely due to the weakening of demand in Europe.

### *Europe shifts to nonagricultural materials*

Europe has continued to constitute the largest foreign market for both agricultural and nonagricultural supplies and materials. The pattern of European purchases, however, has undergone major changes. Whereas in 1929, European expenditures for imports of producers' supplies from the United States had been almost equally distributed between agricultural and nonagricultural materials, in 1955 Europe spent more than twice as much on nonagricultural supplies as on agricultural raw materials.

In 1929 and 1937, respectively, unmanufactured cotton had accounted for about one-fourth and one-fifth of our aggregate exports to Europe. Although during 1955 cotton prices were nearly 80 percent higher than in 1929 and nearly 200 percent greater than in 1937, United States sales of unmanufactured cotton to Europe were valuewise only a fraction of our shipments in 1929 and were even lower than in 1937. While in 1955 the value of exports of unmanufactured tobacco to Europe was more than twice as high as in 1929 and 1937, this was mainly a reflection of the higher tobacco prices prevailing in 1955.

By way of contrast, a number of industrially produced items such as coal, steel scrap, synthetic rubber, chemicals, and synthetic textile materials, which had been relatively insignificant or negligible in our export business with Europe before World War II, comprise a major segment of current United States export sales to that continent. Heavier shipments during recent years of these and other industrial materials such as metals and steel have far overshadowed

the long-run decline in our sales of petroleum products in European markets. In the prewar period, when European refineries had a far smaller capacity than in recent years, petroleum products, particularly lubricating oils and gasoline, had comprised well over 10 percent of the value of our total exports of all goods to Europe.

In the case of Asia, somewhat similar changes appear in the long-run pattern of demand for producers' supplies and materials. Over the entire period under study, Asia, especially Japan, has ranked second to Europe as a market for United States cotton. Although sales of unmanufactured cotton to Asia have been maintained to a relatively greater extent than to Europe, during recent years agricultural raw materials as a group have represented a far smaller share of our total sales to Asia, as well as to Europe, than before World War II. At the same time, a number of nonagricultural materials, especially coal, fertilizers, insecticides, and industrial chemicals, have become prominent items in the recent makeup of our overall exports to Asia.

### *Industrial materials to nearby areas*

The outstanding contribution of Canada and Latin America to the long-term overall gain in exports of industrially-produced supplies and materials should be noted also. In 1955, shipments to Canada alone, amounting to over \$1.2 billion, were three-fourths as large as our sales in this category to all of Europe, while exports to Latin America aggregated well over \$1 billion. Such sales to Western Hemisphere countries, moreover, have displayed an even greater long-term growth than our exports to Europe.

Throughout the postwar period larger sales of a variety of products, including chemicals, textile materials, paper, iron and steel, and glass and other miscellaneous building materials, have characterized the overall growth in such exports to Western Hemisphere countries. In these markets sales of chemicals alone (excluding drugs and medicinals) expanded from less than \$100 million in 1929 and 1937 to well over \$450 million in 1955.

### *New food customers after World War II*

Highlighting the shifts in foreign demand for United States foodstuffs over the period under study were the long-run declining relative importance of the United Kingdom as a market and the emergence of a considerable number of new and important markets after World War II. The United Kingdom, which purchased 30 percent of the total value of United States food exports in 1929 and 1937, accounted for less than 8 percent of our food shipments abroad in 1955. On the other hand, a group of relatively new customers, whose aggregate share in the total was hardly 10 percent in these same two prewar years, provided markets for nearly 45 percent of total United States food exports in 1955. Heading the list of these new customers was Japan which in 1955 constituted the leading overseas market for American food. Also prominent were Yugoslavia, Spain, India, Israel, Egypt, and other countries with whom intergovernmental agreements had been concluded for the sales of grains, fats and oils, dairy products, fruits and other foodstuffs and agricultural items in surplus domestic supply. Shipments under such agreements also comprise a considerable portion of our current food exports to traditional foreign markets including the United Kingdom, Germany, and the Netherlands.

### *Gains in drug shipments to Western Hemisphere*

On the other hand, the expansion in exports of drugs and medicinals by over 12 times since the prewar period can be

primarily associated with increased demands developing in the rest of the Western Hemisphere, particularly in those countries where United States companies have established facilities for the manufacture and distribution of such products. Ranked in order of their size in 1955 our leading Western Hemisphere markets were Mexico, Canada, and Panama. While Western Hemisphere countries have accounted for well over half of the long-term advance in drug exports, the large-scale gains in markets elsewhere in the world, particularly in Belgium, Italy, Japan, and the Philippines were also major contributing factors.

### Export and Domestic Production

Before proceeding to the analysis of the effects of exports on individual domestic producers, it should be noted that much of the production data used herein for the wide range of commodities making up United States exports are based on preliminary reports from the 1954 Census of Manufac-

tures which have only recently become available. Although the conclusions drawn below from the export-production pattern in 1954, as compared to earlier years, can generally be considered to apply to the most recent years, it is significant that almost 60 percent of the total \$3.7 billion rise in domestic exports from 1954 to January-September 1956 originated in the capital equipment and foodstuffs industries which as a group rely on export markets to a far greater extent than other segments of domestic industry (see below). This suggests that the 1954 data may considerably understate the current impact of exports on domestic production. Hence, wherever possible, more recent production information for individual industries is used throughout the discussion.

### Changing pattern of exports to production

Nearly 45 percent of this country's total exports in 1954 was supplied by producers whose foreign sales were 10 percent or more of their overall output (see table 4). Even more significantly, one-fourth of all exports in that year came from industries whose foreign sales comprised more than 20 percent of total sales. In 1937, as in 1954, about 45 percent of total exports originated in industries shipping 10 percent or more of their production to foreign countries. In 1929, however, the comparable share was over 60 percent.

A number of industries which in 1929 had exported 10 percent or more of their total output currently ship less than 10 percent of their overall production abroad. Some of these industries, such as those producing plastics and synthetic resins and other industrial chemicals, were actually among those which experienced long-term gains in export sales and which currently account for a larger portion of our total export business than they did in 1929. Export shipments by such industries, notwithstanding their large-scale expansion, simply failed to keep pace with domestic marketings which have undergone an even greater long-term growth.

A number of other producers which both before and after the war have exported more than 10 percent of their entire output presently account for a smaller share of total exports than in the 1920's. This is especially evident within the producers' supplies and materials category and reflects in great measure the failure of certain agricultural producers to advance their foreign sales at the same rate as nonagricultural producers, and in some cases to maintain even their former volume of foreign shipments.

Certain new industries, on the other hand, whose foreign sales were negligible or nonexistent in the twenties (e. g., synthetic textiles, rubber) have provided a substantial new increment to exports in recent years although representing less than 10 percent of the industry's production.

Table 4 shows that the sharp uptrend in capital equipment exports over the period under study has been sparked by the relatively more export-dependent industries, that is, those which distributed 10 percent or more of their output in foreign markets. Such industries provided 60 percent of all capital equipment exports in 1954, about the same portion as in 1929 and slightly less than in 1937. Producers that shipped 10 percent or more of their output abroad likewise contributed over 60 percent of all exports in the food and drug category during 1954, a share greatly in excess of that in 1937 and almost equal to that in 1929. By contrast, in each of the two other major categories of exports—producers' supplies and materials and nonfood consumer goods—the portion of foreign sales supplied by industries exporting over 10 percent of their output declined in 1954 as compared with both 1929 and 1937 (see table 4).

As a consequence, the capital equipment and the food and drug categories in the more recent period have contributed a rising share of those exports which constitute "10 percent or more" of production (see table 5).

Table 4.—Distribution of Exports by Share of Domestic Production

Commodity group and percentage of production exported	1929		1937		1954	
	Mil. tons of dollars	Percent of exports	Mil. tons of dollars	Percent of exports	Mil. tons of dollars	Percent of exports
Total domestic exports adjusted (excluding military grant aid) <sup>1</sup>	5,120	100.0	3,786	100.0	12,797	100.0
Percent of production exported:						
0-4	604	11.8	433	11.4	2,330	18.2
5-9	651	12.7	465	12.3	2,415	18.9
10 percent and over	3,136	61.5	1,446	38.3	5,501	42.9
10-19	1,394	27.2	282	7.4	2,427	18.9
20-29	136	2.7	170	4.5	2,319	18.1
30-39	532	10.4	643	17.0	376	2.9
40 and over	369	7.2	51	1.3	280	2.2
Undistributed <sup>2</sup>	759	14.8	502	13.2	2,381	18.6
Capital equipment exports, total (machinery and transportation equipment)	1,828	100.0	765	100.0	4,407	100.0
Percent of production exported:						
0-4	67	3.7	52	6.8	269	6.1
5-9	68	3.7	78	10.2	484	11.0
10 percent and over	618	33.6	435	57.0	2,405	54.9
10-19	244	13.3	82	10.7	1,140	25.8
20-29	81	4.4	368	48.1	792	18.0
30-39	261	14.3	47	6.1	467	10.6
40 and over	275	15.0	100	13.1	670	15.2
Undistributed <sup>2</sup>						
Producers' supplies and materials exports, total	2,821	100.0	1,943	100.0	5,460	100.0
Percent of production exported:						
0-4	308	10.9	175	9.0	916	16.8
5-9	439	15.6	361	18.6	1,610	29.5
10 percent and over	1,718	61.5	857	43.9	1,927	35.3
10-19	631	22.4	181	9.3	267	4.9
20-29	89	3.1	109	5.6	1,407	25.8
30-39	386	13.7	591	30.4	80	1.5
40 and over	953	33.8	25	1.3	153	2.8
Undistributed <sup>2</sup>	420	14.9	290	14.9	671	12.3
Food and drug exports, total	763	100.0	288	100.0	1,928	100.0
Percent of production exported:						
0-4	145	19.0	109	37.8	266	13.8
5-9	29	3.7	39	13.5	178	9.2
10 percent and over	518	67.3	95	32.7	1,218	62.7
10-19	347	45.5	69	23.9	841	43.6
20-29	4	0.5	6	2.1	119	6.2
30-39	158	20.7	5	1.7	29	1.5
40 and over	11	1.4	25	8.7	127	6.6
Undistributed <sup>2</sup>	59	7.7	45	15.6	270	14.0
Finished consumer goods (excluding food and drug), total	528	100.0	328	100.0	1,112	100.0
Percent of production exported:						
0-4	196	37.1	57	17.4	670	60.3
5-9	67	12.7	207	63.1	109	9.8
10 percent and over	312	59.2	9	2.7	53	4.8
10-19	312	59.2	9	2.7	53	4.8
20-29						
30-39						
Undistributed <sup>2</sup>	5	1.0	15	4.6	71	6.4
Unidentified by category	2	0.4	2	0.6	179	16.1
Undistributed <sup>2</sup>	2	0.4	2	0.6	179	16.1

1. Adjusted to exclude household and personal effects and motion picture films exported on a royalty basis.

2. Items for which related production data were not available.

Source: U. S. Department of Commerce, Office of Business Economics.



### Machinery exports are greater share of output

Within the capital equipment category exports of machinery since 1929 grew considerably more than exports of commercial transportation equipment. Nearly 75 percent of machinery sales to foreign countries in 1954 can be traced to industries which exported from 10 to 30 percent of their production. In view of the heightened postwar demands of the domestic economy for their products it is doubly significant that a number of the major industries within this group were able to export a greater share of their total output than in the years before World War II. Prominent among such industries were producers of construction and mining equipment, textile machinery, paper bag and boxmaking and a variety of other "specialized" machinery relatively new in our export trade (plastic and rubber processing devices, industrial separators, heat exchangers, etc.).

Table 5.—Distribution of Exports Which Represent 10 Percent or More of Production, by Major Categories

Category	1929		1937		1954	
	Millions of dollars	Percent of exports	Millions of dollars	Percent of exports	Millions of dollars	Percent of exports
Total.....	2,156	290	1,448	199	2,691	290
Capital equipment.....	916	80	485	34	2,405	18
Producers' supplies and materials.....	1,770	54	867	59	1,937	34
Food and drugs.....	618	16	95	0	1,216	28
Other finished consumer goods.....	312	10	9	1	53	1

Sources: U. S. Department of Commerce, Office of Business Economics.

In recent years nearly 90 percent of total exports of construction, excavating, mining and related equipment was produced by industries which marketed not less than 10 percent of their production in foreign countries. The construction and mining equipment industry alone, which in 1954 accounted for more than half of the aggregate exports of this group of related industries as a whole, channeled more than one-fourth of its output into foreign markets. In 1929 this industry had marketed abroad less than 20 percent of a far smaller output (see table 6).

### Tractor exports parallel domestic output

Foreign sales have also provided an impetus to the long-term growth in domestic tractor production. The fourfold expansion in tractor exports, including industrial types, since 1929 has virtually paralleled the rise in domestic production over the same period, with exports accounting for 33 percent of total output in 1929 and 30 percent in 1954.

Table 6.—Exports of Principal Machinery Items\*

Commodity	1929		1937		1954	
	Millions of dollars	Percent of production	Millions of dollars	Percent of production	Millions of dollars	Percent of production
Construction and mining equipment.....	30	19	36	28	311	27
Textile machinery.....	14	11	11	10	32	27
"Specialized" equipment.....	(*)	(*)	(*)	(*)	183	16
Tractors.....	78	33	58	20	325	30
Agricultural machinery.....	60	18	22	8	120	11
Electrical machinery.....	94	8	57	4	388	8
Machine tools.....	20	13	38	20	79	10
Internal combustion engines.....	17	19	10	11	109	12
Hand tools.....	16	12	13	11	41	10

\* Negligible. Sources: U. S. Department of Commerce, Office of Business Economics.

The 1954 export-to-production ratio for tractors was the highest in the entire machinery group. Although the ratio declined moderately to 26 percent in 1955 this does not necessarily denote a dropoff in the strong postwar foreign demand for tractors produced by United States manufacturers. Such producers have greatly stepped up their output in affiliated enterprises abroad. Production originating in these foreign facilities has satisfied a growing segment of foreign demand arising from both within and without the countries in which such facilities are located. Notwithstanding that such production also affected exports of agricultural machinery, foreign sales represented at least 12 percent of domestic output in 1954 (see table 6).

This table also shows that the uptrend in exports of such products as machine tools, internal combustion engines and hand tools has likewise contributed heavily to the long-term growth in output of the supplying industries.

### Aircraft producers benefit from exports

Expanding exports of commercial transportation equipment over the long-term period have likewise stimulated domestic production in the major component industries of this group—aircraft, railroad equipment, and commercial vehicles (trucks and buses). In 1954 industries which devoted 20 percent or more of their output to foreign sales accounted for four-fifths of aggregate exports of transportation equipment (excluding automobile parts for which comparable production data are not available).

The prominent contribution of foreign sales to domestic production is especially noteworthy in the civilian aircraft industry. Here, exports in 1955 were over one-third of total output, far eclipsing the 10 percent in 1929. The emergence of commercial aircraft exports from its infant status in foreign trade three decades ago is evident by comparison of the \$140 million annual rate of exports in January–September 1956, representing over 10 percent of all commercial transportation equipment sales abroad, with its 1925–29 average value of \$2 million. The status of orders (as of October 1956) from foreign-flag airlines foretells the continued expansion of United States shipments in 1957, with large deliveries scheduled beyond that as shipments of large, high-priced, jet-powered planes get underway.

### Exports support railroad equipment output

Although the growth since the twenties in railroad equipment exports as a group has not been especially outstanding, foreign sales have at various times and for different industries within the group performed an essential role in bolstering domestic production. This is strikingly illustrated in the case of railroad passenger cars in 1954. In that year large shipments to Canada served to brake the production drop and boosted total foreign sales to 240 units (\$41 million), over 40 percent of total output. With the completion of Canadian orders and the subsequent upturn in domestic business in 1955, the proportion of production exported declined to 10 percent, still substantially above the 6 percent exported in 1929, while no foreign sales were recorded in 1937. United States railroad equipment manufacturers are actively cultivating foreign markets by designing products for export that meet the peculiar railroading problems of their foreign customers.

### Truck exports smaller share of output

In contrast to the greater contribution of exports to domestic output in the aircraft and railroad equipment industries, rising foreign sales of trucks and buses have failed

to keep pace with the far greater gains in domestic sales. While exports in 1955 accounted for as much as 16 percent of total production, table 7 shows the steady decline in this relationship from the 30 percent in 1929.

Table 7.—Exports of Principal Commercial Transportation Equipment

Commodity	1929		1937		1954		1955	
	Mil- lions of dollars	Per- cent of pro- duc- tion	Mil- lions of dollars	Per- cent of pro- duc- tion	Mil- lions of dollars	Per- cent of pro- duc- tion	Mil- lions of dollars	Per- cent of pro- duc- tion
Civilian aircraft.....	9	10	39	27	102	25	93	54
Locomotives.....	9	11	4	5	42	19	80	n. a.
Freight cars.....	8	4	3	3	13	7	26	11
Railroad passenger cars.....	2	6	—	—	41	11	15	70
Truck and buses.....	150	30	124	24	375	20	401	19

n. a. Not available.

Source: U. S. Department of Commerce, Office of Business Economics.

The increase in United States truck and bus exports over this period has likewise failed to keep pace with the unprecedented rise in the number of such vehicles in use outside the United States. This is the result, on the one hand, of greater local production in previously large foreign markets (e. g., Australia), and on the other of increasingly effective competition from the United Kingdom and Germany in Europe and areas outside the Western Hemisphere.

### Producers' materials less export-dependent

The substantial long-term rise in exports of producers' supplies and materials, though not so great as the growth in capital equipment exports, was characterized by a shift away from the relatively more export-dependent agricultural commodities to the relatively less export-dependent nonagricultural commodities. Table 1 shows the declining share of agricultural commodities in the total category of producers' supplies and materials from almost 40 percent in the 1925-29 period to 34 percent in the thirties and finally to 16 percent during the first three quarters of 1956. The resulting effect on the export-to-production relationships for the category as a whole is shown in table 4. Whereas in 1929 producers that marketed 10 percent or more of their output abroad accounted for 60 percent of all exports of that category, similarly export-dependent producers contributed only 45 percent of the total in 1937, and in 1954 just over one-third.

### Pronounced decline in cotton and tobacco

The diminished share of agricultural raw materials exports was dominated by the decline in cotton and tobacco. Although exports of these products in 1955 still accounted for about one-fourth of their respective crops, this represented a long-term drop from the 45 to 50 percent absorbed by foreign markets in 1929 and the 30 percent in 1937. This downward movement is expected to be reversed in 1956-57 when exports, stimulated by United States Government surplus disposal programs, will take a far larger share of the current crop than in any recent year and approach the rate of earlier periods. Up to the present, at least, the increase since World War II in foreign marketings of other export-dependent agricultural materials, like tallow and flaxseed, have been insufficient to offset the long-run decline in cotton and tobacco.

### U. S. leads in manufactured raw materials

The swing in our industrial markets abroad, particularly Europe, to the greater use of manufactured raw materials of the newer type—synthetic fibers and cloth, synthetic rubber, plastics and related chemicals—reflects a changing pattern of industrial raw material consumption. Despite rising foreign demand in recent years, however, domestic purchasers continue to provide the dominant market for these materials, with foreign sales generally accounting for less than 10 percent of production. The capital-intensive nature of the synthetic and chemical industries and the complex production processes involved suggests that production in a number of foreign countries has expanded at a slower rate than demand, requiring greater imports from the United States.

### Record coal exports bolster output

Record coal exports in 1955 and 1956 were a prominent factor in bolstering previously sagging domestic coal output. Such shipments have accelerated at an even faster pace than rising domestic sales and accounted for 11 percent of total output in 1955 and nearly 14 percent in the first 9 months of 1956, compared to 8 percent in 1954. Rapidly rising steel production in Europe and Japan, which has impinged severely on available resources in these areas, has called for substantial acquisitions of coal from outside sources. It has been estimated by the European Coal and Steel Community that for every 1 percent increase in steel production, a half million more tons of coal is consumed.

Table 8.—Exports of Principal Producers' Supplies and Materials

Commodity	1929		1937		1954		1955	
	Mil- lions of dollars	Per- cent of pro- duc- tion	Mil- lions of dollars	Per- cent of pro- duc- tion	Mil- lions of dollars	Per- cent of pro- duc- tion	Mil- lions of dollars	Per- cent of pro- duc- tion
<b>Agricultural</b>								
Raw cotton.....	764	48	360	31	788	43	477	25
Tobacco, leaf.....	146	44	134	39	303	26	355	29
Tallow.....	(*)	—	(*)	—	91	45	108	45
Flaxseed (including linseed oil).....	(*)	—	(*)	—	56	48	30	28
<b>Nonagricultural</b>								
Plastics and synthetic resins.....	4	23	3	25	22	9	119	n. a.
Synthetic broad- woven textiles.....	2	2	5	2	93	7	98	6
Synthetic rubber.....	—	—	—	—	24	5	81	9
Coal-tar intermediates.....	4	2	10	5	129	8	130	n. a.
Isoprene chemicals.....	30	10	25	8	95	5	121	6
Anthracite coal.....	33	4	15	4	52	10	48	12
Bituminous coal.....	66	3	48	3	253	2	186	11
Iron and steel scrap.....	8	2	79	13	51	0	174	19
Other iron and steel.....	183	6	195	8	685	6	778	6
Refined petroleum products.....	491	13	254	8	615	4	510	4

\* Negligible. n. a. Not available.

1. January-September 1956 exports were 14 percent of production.

2. January-September 1956 exports were 15 percent of available supply.

3. Includes motor fuels, gas and fuel oil, lubricating oil and kerosene.

Source: U. S. Department of Commerce, Office of Business Economics.

Record exports of steel scrap can likewise be traced to the unprecedented rise in steel output abroad. Such foreign sales were of particular significance to the scrap dealers on both East and West coasts who frequently find foreign markets more profitable than sales to the large inland domestic steel-producing centers. These dealers supplied an estimated two-thirds of all scrap exports in 1955.

### Diverse trends in consumer goods

Table 4 contrasts the strikingly reduced export-dependence of finished (nonfood) consumer goods industries as a group with the sustained relative dependence on foreign sales of the food and drug group of producers. In the latter group, producers marketing from 10 to over 40 percent of their output abroad accounted for almost two-thirds of all food and drug

Table 9.—Exports of Principal Food and Drug Items

Commodity	1929		1937		1954		1955	
	Millions of dollars	Percent of production	Millions of dollars	Percent of production	Millions of dollars	Percent of production	Millions of dollars	Percent of production
<b>Food</b>								
Wheat, including flour	192	18	51	8	423	19	480	28
Rice	14	39	7	6	106	48	81	27
Corn	33	6	5	(*)	132	9	170	3
Grain sorghum	2	6	(*)	—	18	14	08	22
Barley	28	18	9	4	37	8	88	18
Lard	108	55	16	10	84	80	76	31
Soybeans and products	1	11	1	2	143	18	194	18
Cottonseed and products	13	18	3	1	71	16	82	45
Dry nonfat milk solids	11	2	(*)	—	131	16	163	36
Cheese	1	1	(*)	—	119	3	144	11
Butter	2	(*)	(*)	—	142	3	192	14
Canned fruit	31	19	21	18	33	6	36	9
Dried and evaporated fruit	34	36	35	44	31	23	32	20
Apples, fresh	33	16	13	9	7	2	9	8
Oranges, including juice	19	19	10	8	59	10	48	10
Vegetables, fresh and canned	20	3	11	2	56	4	68	n. a.
<b>Drugs</b>								
Biological products	3	15	3	15	29	30	29	n. a.
Other drugs and medicines	10	6	15	5	215	18	198	n. a.

n. a. Not available.

1. Includes dried whole milk.

2. Includes estimates for relief shipments.

Source: U. S. Department of Commerce, Office of Business Economics.

exports in 1954, almost double the portion accounted for in drought-affected 1937, and only slightly below the 68 percent of 1929. By contrast, the portion of total foreign sales of finished (nonfood) consumer goods supplied by industries exporting 10 percent or more of their output dipped sharply from over 60 percent in 1929 to just 3 percent and 5 percent respectively in 1937 and 1954.

### Exports top growth in food output

The secular upward trend in domestic production of virtually all the major food products has been exceeded by an even greater long-term rise in the volume and value of

foreign marketings. Last year the following proportions of domestic grain production went abroad: Wheat, 28 percent; rice, 26 percent; grain sorghums, 22 percent (see table 9). Eliminating the quantities that go into storage and considering only those that go into actual use, exports accounted for even greater percentages of output marketed: Wheat, 32 percent; rice, 48 percent; and grain sorghums, 31 percent.

Table 10.—Exports of Principal Finished (Nonfood) Consumer Goods

Commodity	1929		1937		1954		1955	
	Millions of dollars	Percent of production	Millions of dollars	Percent of production	Millions of dollars	Percent of production	Millions of dollars	Percent of production
Passenger cars <sup>1</sup>	294	10	161	7	386	4	461	5
Refrigerators	10	8	13	7	53	10	51	9
Home-type freezers	n. a.	n. a.	n. a.	n. a.	7	3	12	5
Washing machines	2	8	2	8	10	8	10	8
Television receiving sets	n. a.	n. a.	n. a.	n. a.	28	8	11	1
Radio receiving sets	10	6	16	9	8	3	9	3
Home air conditioners	n. a.	n. a.	n. a.	n. a.	17	7	18	n. a.
Apparel	63	1	25	1	106	1	113	n. a.
Cigarettes	17	7	11	8	57	4	66	4

n. a. Not available.

1. The number of passenger cars exported was as follows: 1929, 431,000; 1937, 272,000; 1954, 207,000; 1955, 234,000.

Source: U. S. Department of Commerce, Office of Business Economics.

Table 9 also contrasts the outstanding growth, and the considerable significance to producers, of exports of fats and oils and dairy products, with lagging exports and the declining importance of foreign markets to producers of fresh and processed fruits.

The pioneer position of the United States in the production of antibiotics, vaccines, serums, and other drugs and medicines, combined with greater efforts after the war to improve public health—especially in the newly independent countries of the Far East—has propelled foreign sales at an even faster clip than domestic marketings.

### Passenger car exports lose ground

The diminished contribution of export sales to production of nonfood finished consumer goods in the aggregate, already mentioned, reflects preponderantly the dwindling volume of passenger car sales in foreign markets while domestic business has enjoyed unprecedented prosperity. Foreign sales, 10 percent of total domestic output in 1929, accounted in 1955 for only 3 percent of production. In the expanding world market for passenger cars the United States has steadily lost ground, its share falling from over 40 percent of world exports in 1938 to less than 20 percent in 1955. While exchange restrictions were undoubtedly an important factor in this development, high gasoline and other taxes in many parts of the world also contributed to this trend.